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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,082	01/08/2004	Holger Hoppe	543822003200	5415

25227 7590 03/02/2005

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EXAMINER
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CHAN, EMILY Y

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/753,082	HOPPE, HOLGER	
	Examiner	Art Unit	
	Emily Y Chan	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12-22-04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/8/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-6, 8-9 and 11-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 and 14-15 of copending Application No. 10/753075. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claims 1, 11 and 14 of the instant application and the claims 1, 9 and 15 of co-pending application (10/735075) are directed to the same socket or adapter device and system for testing semiconductor device. The claimed components associated with functions recited in the claims 1, 9 and 15 of the instant application such as "a socket or adaptor", "at least one connection pin"; "a contact device" are all recited in the claims 1, 11 and 15 of the co-pending application (10/735075). Therefore, the instant application encompasses the scope of the co-pending application. Claims 2-5 of the instant application are identical to the claims 2-5 of the co-pending application (10/735075). Claim 6 of the instant

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application recites that the one section of pin has a curved shape, which encompasses the bent shape as claimed in claim 6 of the co-pending application (10/735075). Claims 8-9 of the instant application are identical to the claims 7-8 of the co-pending application (10/735075). Claims 12-13 of the instant application are identical to the claims 10 and 14 of the co-pending application (10/735075).

This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 8-9 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Pfaff et al US patent No. 6,124,720.

With respect to claims 1,3, 8-9 and 11-12, Pfaff et al ('720) disclose a burn –in test sockets or adapter device for surface mount device packages (see Figs 1-4, 10) as claimed, comprising:

at least one socket or adapter device (16),

at least one semiconductor device testing apparatus or a at least one circuit board (14),

at least one connection pin (11) configured to be introduced into a corresponding contact device (contact pad 41) (see Fig. 3) for connection to the testing apparatus or to

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the circuit board (14). Pfaff et al ('720) also disclose that the connection pin (11) is configured such that a clamping connection is provided between the contact device (41) and connection pin (11) when the connection pin (11) is introduced into the contact device (41) (see Col. 4, lines 9-10, "high pressure or gas-tight engagement with the contact pad 41") and that the connection between the connection pin (11) and the contact device (41) is performed without soldering.

With respect to claim 2, Pfaff et al ('720) s socket or adapter device (100) is a semiconductor device testing socket or a semiconductor device testing adapter, respectively, which is configured for testing a semiconductor device (20) (see Col. 4, line 21).

With respect to claims 4-6, Pfaff et al ('720)'s connection pin (11) is made of a flexible or resilient material such as gold-plated steel or alloys such as beryllium-copper alloy (see Col. 3, lines 16-21). Pfaff et al ('720) also disclose that at least one section of the connection pin (11) has a curved shape (curved beam 15,16 ) (see figs. 3-4).

With respect to claim 13, Pfaff et al ('720)'s socket or adapter device (100) comprises a plurality of connection pins (11), each being connected to a corresponding contact device (41) without soldering 9see Col. 3, line 38, "plurality of such contact pin").

With respect to claim 14, Pfaff et al ('720) disclose a method for testing semiconductor devices (see Figs 1-3), comprising:

connecting a socket or adapter device (100) to a testing system (40) wherein at least one connection pin (11) is connected to a corresponding contact device (41);

loading the socket or adapter device (100) with a semiconductor device (20) to be tested, wherein the connection of the connection pin (11) to the contact device (41) is performed by solderless surface mounting.

Therefore, Pfaff et al ('720) anticipate the claimed invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pfaff et al ('720) .

Pfaff et al ('720)'s connection pin (11) has a curved shape. Pfaff et al ('720) do not specify that the curved shape is a shape of a wave attenuated in a direction leading away from the socket or adapter device (10) as claimed . However, changing shape and size are generally recognized as being within the level of ordinary skill in the art (see MPEP 2144.04(1),(IVA)&(IVB). Therefore, the claimed shape of a wave attenuated in a direction leading away from the socket or adapter device would have been obvious to one of skilled in the art in view of Pfaff et al ('720).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pfaff et al ('720) in view of Akram et al US patent No. 6,072,326.

Pfaff et al ('720) do not recite that their contact device (41) comprises a recess or a bore into which the connection pin is introduced.

Akram et al ('326) disclose a system for testing semiconductor components (see Figs. 1-3 and 6), comprising a socket or adapter device (16), at least one connection pin (28) and a contact device (14). Akram et al ('326) particularly teach that the contact device (14) comprises a recess or a bore (see col. 3, lines 59-60, "electrical receptacles") into which the connection pin (28) is introduced.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to substitute Pfaff et al ('720)'s contact device by Akram et al ('326)'s electrical receptacles for electrical communication between the socket or adapter device and the test board because Akram et al ('326) disclose that their system is an improved system for testing semiconductor components including bare dice and chip scale package (see Col. 1, lines 5-8).

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 1-11 and 13-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Y. Chan whose telephone number is 571-272-1956. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC  
2-18-05

  
**VINH NGUYEN**  
**PRIMARY EXAMINER**  
A.U. 2829  
02/25/05